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<u> </u>			Attorney Docket Number		ss it uispiays a valic on	18 CONTO NUMBER.		
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	(37 CFR 1	.63)	Application Number					
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Submitt with Init	ial OR Fi	iling (surcharge	Group Art Unit	-				
Filing		37 CFR 1.16(e)) equired)	Examiner Name					
As a be	low named in	ventor, I hereby d	leclare that:					
My resi	dence, mailinç	g address, and cit	izenship are as stated	below next to my	name.			
			only one name is listed below			ural :		
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Application	on Number	and	d was amended on (MM/DD/Y	YYY)	(if appl	icable).		
			contents of the above identifi	ied specification, inclu	iding the claims,			
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continuation-ir	n-part applications,	, material information w	s material to patentability as de which became available betwe ontinuation-in-part application.	en the filing date of th				
			. 119(a)-(d) or 365(b) of any fo					
inventor's cert United States	ificate, or 365(a) of America, listed	of any PCT international below and have also i	al application which designate dentified below, by checkign t	d at least one country	other than the			
patent or inve	patent or inventor's certificate, or any PCT international application having a filing date before that of the application on which priority is claimed.							
	Prior Foreign Applications Country Foreign Filing Date Priority Certified Copy Attached? Numbers(s) (MM/DD/YYYY) Not Claimed YES NO							
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Additional foreign ap	plication numbers are listed on a supplem	nental priority data sheet PTO/SB/02B attached he	reto:
I hereby claim the benefit under 35 U.S.	C. 119 (e), 120, or 365 (c) of any U.S. or I	PCT application(s) listed below.	
Application Numbers(s)	Filing Date (MM/DD/YYYY)	Addisional configuration	: .
10/356,661	1/31/2003	Additional application numbers are listed on a supplemental priority data sheet	
		PTO/SB/02B attached hereto.	1 - Te

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DECLARATION - Utility or Design Patent Application

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Address P.O. Box 160727						
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City Austin		TX State	78716-0727 ZIP			
Country USA	Telephone (5	12) 263-1842	FAX (512) 263-1469			
I hereby declare that all statements made herein of my ow belief are believed to be true; and further that these states like so made are punishable by fine or imprisonment, or be the validity of the application or any patent issued thereo	nents were made with oth, under 18 U.S.c. 1	the knowledge that Will	ful false statements and the			
NAME OF SOLE OR FIRST INVENTOR:	A petition	has been filed fo	r this unsigned inventor			
Given Name (first and middle [if any])		Family Name or Surname	Gulati			
Inventor's Manu Gwad	u		Date 10/14/03			
Residence: City San Francisco	State CA	Country USA	Citizenship ^{India}			
Mailing Address 181-A Landers St.						
Mailing Address						
City San Francisco Sta	te CA	ZIP 94114	Country USA			
NAME OF SECOND INVENTOR:	A petition	has been filed fo	r this unsigned inventor			
Given Name Laurent R. (first and middle [if any]) Family Name Moll or Surname						
Inventor's Signature Date 14 oct 2003						
Residence: City Saratoga	State CA	Country USA	Citizenship France			
Mailing Address 18253 Purdue Drive						
Mailing Address						
City Saratoga Sta	ste CA	ZIP 95070	Country USA			
Additional inventors are being named on the supplemental Additional inventor(s) sheets(s) PTO/SB/02A attached hereto.						

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	Application Number			,
OR NT	Filing Date			
	First Named Inventor	Manu Gulati		
	Group Art Unit			
	Examiner Name		*	
	Attorney Docket Number	BP3248		

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	OR	at Customer Number	34,399]—		Number	Customer Bar Code Il Here	
	Practitione	r(s) named below:						
		Name			Regist	ration Nu	mber	
. >		William W. Kidd			. 31,7	772		
		Bruce E. Garlick			36,5	20		
		James A. Harrison			40,4	101		
		Timothy W. Markison		• .	33,5	34		
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OR	R	· · · · · · · · · · · · · · · · · · ·			•		<u>.</u>	
Firm Indivi	or dual Name	William W. Kidd						
Address		P.O. Box 160727				,		
Address					:		•	
City		Austin		State	TX	Zip	78716	5-0727
Country		USA						
Telepho	ne	(512) 263-1842			Fax	(512) 2	63-1469	
₩	plicant/Inventor	d of the entire interest. See 37 CF 7 CFR 3.73(b) is enclosed (Form	FR 3.71 PTO/SB/96).					
		SIGNATURE of A	pplicant or Assig	nee of Re	ecord		· · · · · · · · · · · · · · · · · ·	
Name		ee Hendersor	7	title:	Mana	SU	IP Pur	Holio
Signature		Aludi				0		
Date		17000						
NOTE:	Signatures of a Submit multiple	ill the inventors or assignees of rec e forms if more than one signature	ord of the entire int is required, see be	erest or the	eir representa	tive(s) are r	equired.	
×	*Total of 1	forms are submitted.		TO: Assis	tant Commiss 20231	loner for Pa	tents,	

Certificate Under 37 CFR 3.73(b)

Applicants:

Manu Gulati

Laurent R. Moll

Entitled: APPARATUS AND METHOD TO RECEIVE AND ALIGN INCOMING DATA IN A BUFFER TO EXPAND DATA WIDTH UTILIZING A SINGLE WRITE PORT MEMORY DEVICE Application No. Filing Date: **Broadcom Corporation** a, California Corporation (Name of Assignee) (Type of Assignee) states that it is: the assignee of the entire right, title, and interest; or an assignee of an undivided part interest in the patent application/patent identified above by virtue of either: An Assignment for the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. OR A chain of title for the inventor(s) of the patent application/patent identified above to the current assignee as shown below: From The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. To: The document was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. To: The document was recorded in the Patent and Trademark Office at ____, Frame _____, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.81

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

)

ASSIGNMENT

WHEREAS, the undersigned inventors, hereinafter called the "Assignors", have invented a new and useful invention entitled:

5

APPARATUS AND METHOD TO RECEIVE AND ALIGN INCOMING DATA IN A BUFFER TO EXPAND DATA WIDTH UTILIZING A SINGLE WRITE PORT MEMORY DEVICE

for which reference a full description is here made in an application for Letters Patent of the United States filed herewith.

WHEREAS, Broadcom Corporation, a USA company having a principal office and place of business at, 16215 Alton Parkway Irvine California 92618-7013 hereinafter called the "Assignee", is desirous of acquiring the entire right, title and interest in and to said invention, the application above identified, and in, to and under Letters Patent which may be obtained for said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all division, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

FURTHER, be it known that the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

And the Assignors do hereby covenant and agree, for themselves and their legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patents herein contemplated; that they will promptly execute and deliver to the Assignee any and all additional

BP3248

papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representatives, and facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

IN TESTIMONY WHEREOF, the Assignors have hereunto set their hands on the date indicated below.

Manu Gulati	10/14/03	Tola.	140ct 2003
Manu Gulati	date	Laurent R. Moll	date
:	date		date
	date		date



BROADCOM CORPORATION 16215 Alton Parkway Irvine, California 92618

> Phone: 949-450-8700 Fax: 949-450-8710

May 20, 2003

To whom it may concern:

I, Henry Samueli, hereby authorize Dee Henderson, Intellectual Property Portfolio Manager, to execute documents relating to US and foreign patent and trademark matters on behalf of Broadcom Corporation and/or its subsidiaries.

Henry Samueli, Ph.D.

Chief Technical Officer and Co-Chairman